

Amendments to the Abstract:

Please replace the previous Abstract with the following redlined Abstract:

A switching voltage regulator adapted for providing provides a regulated voltage at an output terminal. The switching voltage regulator includes a is described which comprises at least one MOS transistor having a non-drivable terminal coupled with said the output terminal and a control circuit receiving a signal that is representative of the current signal flowing in said the MOS transistor. The control circuit comprises includes a compensation device adapted for cancelling the thermal variation of said the signal that is representative of the current signal flowing in said the MOS transistor.